

WE CLAIM:

1 1. A UseNet server system comprising:
2 a backend server for storing articles;
3 a first communication link connected to said backend server;
4 a cluster of servers, connected to said first communication link, wherein each server
5 in said cluster of servers is adapted to be in communication with the other servers in said cluster of
6 servers, and wherein at least one of said servers in said cluster of servers is adapted to store retrieved
7 articles from said backend server when said articles are requested by a customer;
8 a second communication link adapted to provide article requests from at least a first
9 customer to said cluster of servers and adapted to provide at least one of said retrieved articles to said
10 at least one customer; and
11 said UseNet server system further adapted to retrieve stored articles from said at least
12 one server in said cluster of servers when a first requested article has been previously requested by
13 a second customer and is stored in said at least one server in said cluster of servers.

1 2. The UseNet server system of claim 1, wherein a second server of said cluster of
2 servers is adapted to retrieve said first requested article from said at least one of said servers in said
3 cluster of servers when said customer requested article has already been requested from said backend
4 servers due to a previous customer request for said first requested article.

1 3. The UseNet server system of claim 1, wherein said retrieved articles stored in said at
2 least one server in said cluster of servers are each stored for a period of time until more storage space
3 is required.

1 4. The UseNet server system of claim 1, where said retrieved articles stored in said at
2 least one server in said cluster of servers are stored in a memory device that is divided into smaller
3 sized data storage units wherein each data storage unit is dynamically assigned a time interval such
4 that only articles originally posted within said dynamically assigned time interval are stored in each
5 said storage unit.

1 5. The UseNet server system of claim 1, wherein said customer requests for articles can
2 be fulfilled by retrieving said requested articles from said at least one server in said cluster of servers
3 for about 20 to 90 percent of said customer requests for articles.

1 6. The UseNet server system of claim 1, wherein said first communications link is a
2 TCP/IP communication session.

1 7. The UseNet server system of claim 1, wherein said communications link uses a
2 Network News Transfer Protocol (NNTP).

1 8. The UseNet server system of claim 1, wherein each said server in said cluster of
2 servers is adapted to be in communication with the other servers in said cluster of servers via a
3 network connection.

1 9. The UseNet server system of claim 8, wherein said network connection comprises at
2 least one of an wired connection, a wireless connection, an optical connection, and a satellite
3 connection or link.

1 10. The UseNet server system of claim 1, wherein the second communications link is a
2 TCP/IP session.

1 11. The UseNet server system of claim 1, wherein the second communications link uses
2 a Network News Transfer Protocol (NNTP).

1 12. The UseNet server system of claim 1, wherein said each server in said cluster of
2 servers is a commodity server.

1 13. The UseNet server system of claim 1, wherein said backend server and said cluster of
2 servers are geographically distant from each other.

1 14. An article or data storage and retrieval system comprising:
2 a plurality of servers forming a server cluster, each said server of said plurality of
3 servers having storage space for storing articles and data;
4 a communication network allowing each one of said plurality of servers to
5 communicate with each other;
6 a backend server comprising storage space for storing articles, said backend server
7 being in communication with said server cluster via a first communication link;
8 a first server of said plurality of servers adapted to accept a request for a first article
9 from a customer;
10 said first server, via said communication network, queries said plurality of servers for
11 said first article;
12 if said first article is found in one of said plurality of servers storage space, said first
13 article is provided to said first server for delivery to said customer; and
14 if said first article is not found in one of said plurality of server, said first server
15 requests said first article from said backend server.

1 15. The system of claim 14, wherein said backend server provides said first article to said
2 first server for delivery to said customer and wherein said first server stores said first article in said
3 first server's storage space.

1 16. The system of claim 14, wherein said storage space of each one of said plurality of
2 servers combined provides less article retention then said storage space of said backend server.

1 17. The system of claim 14, wherein when said first server queries said plurality of servers
2 for said first article, said first article is found in one of said plurality of servers at least 20 percent of
3 the time.

1 18. The system of claim 14, wherein said communication network comprises at least one
2 of a wired connection, a wireless connection, an optical connection, and a satellite connection or link.

1 19. The system of claim 14, wherein said first communication link is a TCP/IP session.

1 20. The system of claim 14, wherein said backend server is geographically separated from
2 said plurality of servers.

1 21. The system of claim 14, wherein each said memory space of each said server of said
2 plurality of servers is logically divided in smaller sized storage units such that each said storage space
3 is assigned a time interval for storing articles originally posted on a UseNet within said time interval.

1 22. The system of claim 21, wherein said backend server provides said first article to said
2 first server for delivery to said customer and said first server stores said first article in a first storage
3 space that is assigned a time interval that includes a date of said first article.

1 23. The system of claim 21, wherein said backend server provides said first article to said
2 first server for delivery to said customer and wherein said first server attempts to store said first
3 article in a first storage space such that, if there are only time interval storage spaces having time
4 intervals newer than a date of said first article, then said first article is not stored in said first server.

1 24. The system of claim 21, wherein said backend server provides said first article to said
2 first server for delivery to said customer and wherein said first server attempts to store said first
3 article in a first storage space such that, if there are only time interval storage spaces having time
4 intervals older than a date of said first article, then storage space having the oldest time interval is
5 reassigned a time interval that includes said date of said first article and said first article is stored
6 therein.

1 25. A method for providing news services comprising:
2 providing a local network cluster of news servers;
3 caching data and metadata related to news services with said news servers in said local
4 network cluster;
5 receiving a request for news services form a client associated with said local network
6 cluster;
7 determining whether said requested news services are available from said news servers
8 in said local network cluster;
9 if so, retrieving said requested news services from said news servers in said local
10 network cluster and providing said requested news services to said client directly from said local
11 network cluster; and
12 if not, creating a session to one of at least one backend server(s) to retrieve said
13 requested news services.

1 26. The method of claim 25, wherein said requested news services are retrieved from said
2 one backend server in a compressed format.

- 1 27. The method of claim 25, further comprising:
- 2 storing said retrieved requested news service;
- 3 providing said retrieved requested news service to said client; and
- 4 storing said retrieved requested news service in at least one of said news servers.